AMENDMENTS TO THE CLAIMS

None of the claims is currently amended.

1. (Original) In a computer network comprising nodes, a method of administering sending of teleconference data over the network comprising:

determining an allocated bandwidth corresponding to the sending;

communicating the allocated bandwidth to the nodes;

inhibiting use of bandwidth by any of the nodes in excess of the allocated bandwidth;

monitoring at least one nodal happiness factor;

adjusting the allocated bandwidth in response to the at least one nodal happiness factor;

dynamically measuring bandwidth use of program elements at a node; and

assigning bandwidth among program elements, such that the total of assigned bandwidth is not greater than said allocated bandwidth.

2. (Original) The method of claim 1, further comprising:

determining for each program element at each node a desired bandwidth, the desired bandwidth being a total minimum bandwidth at which all program elements have sufficient bandwidth to operate at maximum speed; and

determining for each program element a happiness factor, the happiness factor being proportional to the assigned bandwidth and inversely proportional to the desired bandwidth.

3. (Original) In a computer network comprising nodes, a system configured to administer at least one teleconference over the computer network, the system comprising:

a means for determining an allocated bandwidth corresponding to the at least one teleconference;

a means for communicating the allocated bandwidth to the nodes; and

a means for inhibiting use of bandwidth by any of the nodes in excess of the allocated bandwidth;

a means for monitoring at least one nodal happiness factor;

a means for adjusting the allocated bandwidth in response to the at least one nodal happiness factor;

a means for dynamically measuring bandwidth use of program elements at a node; and

a means for assigning bandwidth among program elements, such that the total of assigned bandwidth is not greater than the allocated bandwidth.

4. (Original) The system of claim 3, further comprising:

a means for determining a desired bandwidth for each program element at each node, the desired bandwidth being a total minimum bandwidth at which all program elements have sufficient bandwidth to operate at maximum speed; and

a means for determining a happiness factor for each program element, the happiness factor being proportional to the assigned bandwidth and inversely proportional to the desired bandwidth.

5. (Previously added) A computer network supporting one or more processes involving transmission of large amounts of data, the computer network comprising:

an administrator node, adapted to allocate nodal maximum bandwidths for one or more nodes of the network and to communicate to the one or more nodes the respective allocated nodal maximum bandwidths; and

a client node, adapted to receive an allocated nodal maximum bandwidth from the administrator node, and further adapted to determine current values of a set of variables related to bandwidth usage by the one or more processes at the client node and to communicate the current values to the administrator node, wherein the administrator node utilizes the current values to adjust the allocated nodal maximum bandwidths for the one or more nodes.

6. (Previously added) The computer network of claim 5, wherein the one or more processes include a teleconference.

7. (Previously added) The computer network of claim 5, wherein the one or more processes include a broadcasting process.

8. (Previously added) The computer network of claim 5, wherein the one or more processes include a video serving process.

9. (Previously added) The computer network of claim 5, wherein the allocated nodal maximum bandwidth for each node is shared by all program elements at the node.

10. (Previously added) The computer network of claim 5, wherein the allocated nodal maximum bandwidth for each node is shared by program elements at the node associated with a predetermined class of processes.

11. (Previously added) The computer network of claim 10, wherein the predetermined class of processes comprises the one or more processes involving transmission of large amounts of data.

12. (Previously added) The computer network of claim 5, wherein the administrator node is adapted to allocate nodal maximum bandwidths for all nodes of the network.

13. (Previously added) The computer network of claim 5, wherein the nodal maximum bandwidths are determined based on participation of the respective nodes in the one or more processes involving transmission of large amounts of data.

14. (Previously added) The computer network of claim 5, wherein the set of variables related to bandwidth usage by the one or more processes involving transmission of large amounts of data comprises:

at least one variable indicating an actual usage of bandwidth at a node by the one or more processes; and

one or more variables related to a predicted usage of bandwidth at a node by the one or more processes in the immediate future.

15. (Previously added) The computer network of claim 14, wherein the one or more variables related to the predicted usage of bandwidth comprises:

a number of active processes at the node that are capable of transmitting data; and

a number of active connections on the node, wherein each connection requires a separate copy of data being transmitted.

16. (Previously added) The computer network of claim 5, wherein the client node is further adapted to calculate a nodal happiness factor based on the set of variables related to bandwidth usage by the one or more processes and on the allocated nodal maximum bandwidth.

17. (Previously added) The computer network of claim 5, wherein the client node publishes the current values of the set of variables related to bandwidth usage at the client node to be accessed by all nodes of the network.

18. (Previously added) The computer network of claim 5, wherein:

the client node is further adapted to assign portions of the allocated nodal maximum bandwidth among program elements at the client node, such that the total of the assigned portions is not greater than the allocated maximum bandwidth.

19. (Previously added) The computer network of claim 18, wherein the client node periodically calls a monitoring program for:

exchanging information with each program element; and

updating variables indicating an actual usage and a predicted usage of bandwidth by each program element.

20. (Previously added) The computer network of claim 19, wherein the monitoring program comprises:

one or more function sets which, if manipulated by a node other than the administrator node, render the monitoring program unusable.

21. (Previously added) The computer network of claim 19, wherein the monitoring program comprises:

a hacker variable which indicates whether or not any node other than the administrator node has attempted to turn off the monitoring program.

22. (Previously added) The computer network of claim 18, wherein the client node periodically calls a bandwidth allocation program for assigning portions of the allocated nodal maximum bandwidth among program elements.

23. (Previously added) The computer network of claim 22, wherein the bandwidth allocation program is for:

determining a priority and a maximum and minimum requested bandwidth for each program element; and

in order of priority, assigning to each program element the minimum requested bandwidth, until the allocated nodal maximum bandwidth is used up; and

if the allocated nodal maximum bandwidth is not used up by the assigning of minimum requested bandwidths, assigning additional bandwidth to each program element in order of priority.

24. (Previously added) The computer network of claim 18, wherein the client node periodically calls a happiness query program that determines a happiness factor of each program element.

25. (Previously added) The computer network of claim 24, wherein the happiness factor of a program element is an average score of happiness over all connections to which the program element is transmitting data.

26. (Previously added) The computer network of claim 24, wherein the happiness factor of each program element can be visually displayed using color coding.

27. (Previously added) The computer network of claim 24, wherein the happiness factor of each program element is published to be accessed by all nodes of the network.

28. (Previously added) A computer readable medium for administering one or more processes involving transmission of large amounts of data in a computer network, the computer readable medium comprising:

an administrator program, executable on the computer network for allocating nodal maximum bandwidths for one or more nodes of the network and communicating to the one or more nodes the respective allocated nodal maximum bandwidths; and

a client program, executable on the computer network for receiving an allocated nodal maximum bandwidth from the administrator program, and further for determining current values of a set of variables related to bandwidth usage by the one or more processes at the client node and communicating the current values to the administrator program, wherein the administrator program utilizes the current values to adjust the allocated nodal maximum bandwidths for the one or more nodes.

29. (Previously added) The computer readable medium of claim 28, wherein:

the client program is further for assigning portions of the allocated nodal maximum bandwidth among program elements at a client node, such that the total of the assigned portions is not greater than the allocated maximum bandwidth.

30. (Previously added) The computer readable medium of claim 28, wherein the client program further comprises:

a monitoring program for exchanging information with each program element and updating variables indicating an actual usage and a predicted usage of bandwidth by each program element.

31. (Previously added) The computer readable medium of claim 28, wherein the client program further comprises a bandwidth allocation program for:

determining a priority and a maximum and minimum requested bandwidth for each program element,

in order of priority, assigning to each program element the minimum requested bandwidth until the allocated nodal maximum bandwidth is used up, and

if the allocated nodal maximum bandwidth is not used up by the assigning of minimum requested bandwidths, assigning additional bandwidth to each program element in order of priority.

32. (Previously added) The computer readable medium of claim 28, wherein the client program further comprises:

a happiness query program for determining a happiness factor of each program element, wherein the happiness factor of a program element is an average

score of happiness over all connections through which the program element is transmitting data.

33. (Previously added) The computer readable medium of claim 32, wherein the happiness query program is further for:

visually displaying the happiness factor of each program element using color coding; and

publishing the happiness factor of each program element at a node to be accessed by all nodes of the network.